

RAW SEQUENCE LISTING

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Application Serial Number: 10/527,375
Source: PET
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RAW SEQUENCE LISTING

DATE: 03/24/2005

PATENT APPLICATION: US/10/527,375

TIME: 11:21:59

Input Set : A:\Final sequence list-13173-00008-US.txt

Output Set: N:\CRF4\03242005\J527375.raw

3 <110> APPLICANT: Heim, Ute
 4 Herbers, Karin
 5 Sonnewald, Uwe
 7 <120> TITLE OF INVENTION: Transgenic expression cassettes for the expression of
 nucleic
 8 acids in carbohydrate-storing sink tissues of plants
 10 <130> FILE REFERENCE: 13173-00008-US
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/527,375
 C--> 12 <141> CURRENT FILING DATE: 2005-03-10
 12 <150> PRIOR APPLICATION NUMBER: PCT/EP 2003/009855
 13 <151> PRIOR FILING DATE: 2003-09-05
 15 <150> PRIOR APPLICATION NUMBER: DE 102 42 204.4
 16 <151> PRIOR FILING DATE: 2002-09-10
 18 <160> NUMBER OF SEQ ID NOS: 8
 20 <170> SOFTWARE: PatentIn version 3.3
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 1300
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Vicia faba
 27 <220> FEATURE:
 28 <221> NAME/KEY: promoter
 29 <222> LOCATION: (1)..(1300)
 31 <400> SEQUENCE: 1
 32 gattgtctct agatgtaggt gtggttttat cgaactgagt taacagactt tgtgtgttct 60
 33 ttatttcttt tgtcttgaat tattgttact gtcattattg gtgttatttg atttaacaag 120
 34 taaaactatc tgatttaaca agtaaagcaa gttattatag acatcttttc caacatctgt 180
 35 cccgtgagaa acaaaattat aacttggaag acttgaatta aggtggtgtc ttgaaaaaat 240
 36 aatatacttc gtcagtgcac catgttgcag taaatgtgca acagggtaca ccccttcatt 300
 37 gcaatgttca atttcagaca gagatttggc acaataagtt gcagtaaatg tgtaacatgt 360
 38 tgcaccattc cagctttata ctttttgaga caaagaatta gtgcaatcaa ttataggtat 420
 39 gagaaactta tttttctcat tagttggtca gctgtactat ttgtatgata gtttaaatat 480
 40 caagttggat catttatgtt ataatgccat ctttcttcc taattctctc tatttctctc 540
 41 attatctcaa tctttctatt attcactatt gttttcgtga ttgaaatttt aatccaacaa 600
 42 ataaatgaaa acgcaacaca attgataaaa tacatcaaac ttaagttaaa ggtgtaagtt 660
 43 tgagtcttga ttttagtataa aattttatct atcaacatta taatttatta attttaaatt 720
 44 ttttattatt tatatatatta caaatacaat ttctgattta aatataataa ataacattaa 780
 45 aaatatatatt ttaaataaca ttatataaat tatgtgacgt aacaccaaatt gattattgtc 840
 46 atatcaatat cagccataa attatgggat caactatata aatttgaaga ggataaaaag 900
 47 aaggaaaaaa aatattaaat ataggaaaaa actgtttttt taaaaggact aaagttttgt 960
 48 atatcaaaaat caaaatcaaa attgaaatta aaatttcatt tttatattaa aaacaaaaaa 1020
 49 aaagcttgag ttttaattta aacacaagtc aatattcttc tccaagtgtg aaaactcaca 1080
 50 atcggcgctt tttaaaggaa aaaatgactt ttcacgacct gcgtttggag gtgctgtaac 1140
 51 gtggcaataa gtcacgaaag agcgtgcggt gtagtacaaa aaaaactaaa atccagaagc 1200
 52 taaaagctcg tgattcgatg ccacatcata ttctttttca acactagtaa gagtacagtg 1260

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53 tagaatacaa aacaccacct ctattataga gagaagaggt 1300
56 <210> SEQ ID NO: 2
57 <211> LENGTH: 1360
58 <212> TYPE: DNA
59 <213> ORGANISM: Vicia faba
61 <220> FEATURE:
62 <221> NAME/KEY: promoter
63 <222> LOCATION: (1)..(1300)
65 <220> FEATURE:
66 <221> NAME/KEY: 5'UTR
67 <222> LOCATION: (1301)..(1357)
69 <220> FEATURE:
70 <221> NAME/KEY: misc_feature
71 <222> LOCATION: (1358)..(1360)
72 <223> OTHER INFORMATION: ATG-Start-Codon
74 <400> SEQUENCE: 2
75 gattgtctct agatgtaggt gtggttttat cgaactgagt taacagactt tgtgtgttct 60
76 ttattttcttt tgtcttgaat tattgttact gtcattattgt gtgttatttg atttaacaag 120
77 taaaactatc tgatttaaca agtaaagcaa gttattatag acatcttttc caacatctgt 180
78 cccgtgagaa acaaaattat aacttggaag acttgaatta aggtgggtgtc ttgaaaaaat 240
79 aatatacttc gtcagtgcac catgttgcag taaatgtgca acaggttaca ccccttcatt 300
80 gcaatgttca atttcagaca gagatttggc acaataagtt gcagtaaagt tgtaacatgt 360
81 tgcaccattc cagctttata ctttttgaga caaagaatta gtgcaatcaa ttataggtat 420
82 gagaaactta tttttctcat tagttgggtca gctgtactat ttgtatgata gtttaaatat 480
83 caagttggat catttatgtt ataatgccat ctttccttcc taattctctc tatttctctc 540
84 attatctcaa tctttctatt attcactatt gttttcgtga ttgaaatttt aatccaacaa 600
85 ataaatgaaa acgcaacaca attgataaaa tacatcaaac ttaagttaaa ggtgtaagtt 660
86 tgagtcttga tttagtataa aattttatct atcaacatta taatttatta attttaaat 720
87 ttttattatt tatatattta caaatacaat ttctgattta aatataataa ataacattaa 780
88 aaatatattt ttaaataaca ttatataaat tatgtgacgt aacaccaaat gattattgtc 840
89 atatcaatat cagccataa attatgggat caactatata aatttgaaga ggataaaaag 900
90 aaggaaaaaa aatattaaat ataggaaaaa actgtttttt taaaaggact aaagttttgt 960
91 atatcaaaat caaaatcaaa attgaaatta aaatttcatt tttatattaa aaacaaaaaa 1020
92 aaagcttgag ttttaatttt aacacaagtc aatattcttc tccaagtgtg aaaactcaca 1080
93 atcggcgctt tttaaaggaa aaaatgactt ttcacgaccc gcgtttggag gtgctgtaac 1140
94 gtggcaataa gtcacgaaag agcgtgcgtg gtagtacaaa aaaaactaaa atccagaagc 1200
95 taaaagctcg tgattcgatg ccacatcata ttctttttca acactagtaa gagtacagt 1260
96 tagaatacaa aacaccacct ctattataga gagaagaggt acaatacaaa caatcaaagc 1320
97 tctgtgagtg tgtgagtgag tgagagaaat tccaaccatg 1360
100 <210> SEQ ID NO: 3
101 <211> LENGTH: 1582
102 <212> TYPE: DNA
103 <213> ORGANISM: Vicia faba
105 <220> FEATURE:
106 <221> NAME/KEY: promoter
107 <222> LOCATION: (1)..(1300)
109 <220> FEATURE:
110 <221> NAME/KEY: 5'UTR
111 <222> LOCATION: (1301)..(1357)

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113 <220> FEATURE:
114 <221> NAME/KEY: transit_peptide
115 <222> LOCATION: (1358)..(1582)
117 <400> SEQUENCE: 3
118 gattgtctct agatgtaggt gtggttttat cgaactgagt taacagactt tgtgtgttct 60
119 ttatttcttt tgtcttgaat tattgttact gtcattattgt gtgttatttg atttaacaag 120
120 taaaactatc tgatttaaca agtaaagcaa gttattatag acatcttttc caacatctgt 180
121 cccgtgagaa acaaaattat aacttggaag acttgaatta aggtgggtgc ttgaaaaaat 240
122 aatatacttc gtcagtgcac catgttgagc taaatgtgca acagggttaca ccccttcatt 300
123 gcaatgttca atttcagaca gagatttggc acaataagtt gcagtaaagt tgtaacatgt 360
124 tgcaccattc cagctttata ctttttgaga caaagaatta gtgcaatcaa ttataggat 420
125 gagaaactta tttttctcat tagttgggtc gctgtactat ttgtatgata gtttaaatat 480
126 caagttggat catttatgtt ataatgccat ctttccttcc taattctctc tatttctctc 540
127 attatctcaa tctttctatt attcactatt gttttcgtga ttgaaatttt aatccaacaa 600
128 ataaatgaaa acgcaacaca attgataaaa tacatcaaac ttaagttaaa ggtgtaagtt 660
129 tgagtcctga tttagtataa aattttatct atcaacatta taatttatta attttaaatt 720
130 ttttattatt tatataattt caaatacaat ttctgattta aatataataa ataacattga 780
131 aaatatattt ttaaataaca ttatataaat tatgtgacgt aacaccaaatt gattattgtc 840
132 atatcaatat cacgccataa attatgggat caactatata aatttgaaga ggataaaaag 900
133 aaggaaaaaa aatattaaat ataggaaaaa actgtttttt taaaaggact aaagttttgt 960
134 atatcaaaat caaaatcaaa attgaaatta aaatttcatt tttatattaa aaacaaaaaa 1020
135 aaagcttgag tttaatttta aacacaagtc aatattcttc tccaagtgtg aaaactcaca 1080
136 atcggcgctt tttaaaggaa aaaatgactt ttcacgacct gcgtttggag gtgctgtaac 1140
137 gtggcaataa gtcacgaaag agcgtgcgtg gtagtacaaa aaaaactaaa atccagaagc 1200
138 taaaagctcg tgattcgatg ccacatcata ttctttttca acactagtaa gagtacagtg 1260
139 tagaatacaa aacaccacct ctattataga gagaagaggt acaatacaaa caatcaaagc 1320
140 tctgtgagtg tgtgagtgag tgagagaaat tccaattatg gcttccatga caatgcggtt 1380
141 tcatccaaat tccaccgccg taaccgaatc cgttcctcgc cgtggctccg tttacggatt 1440
142 catcggttac agatcctcgt cggtgttcgt ccgaacgaac gttatcaagt atcgttctgt 1500
143 taagcgtaat ctggaattta ggaggagaag cgctttctct gtgaagtgtg gttctggtta 1560
144 tgaagcgaaa cagaaagcca tg 1582
147 <210> SEQ ID NO: 4
148 <211> LENGTH: 26
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Description of the artificial sequence:
154     Oligonucleotide primer
156 <400> SEQUENCE: 4
157 gattgtctct agatgtaggt gtgttt 26
160 <210> SEQ ID NO: 5
161 <211> LENGTH: 24
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of the artificial sequence:
167     Oligonucleotide primer
169 <400> SEQUENCE: 5
170 catggaagcc atggttgaat ttct 24

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173 <210> SEQ ID NO: 6
174 <211> LENGTH: 27
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Description of the artificial sequence:
180     Oligonucleotide primer
182 <400> SEQUENCE: 6
183 ttcctgatcc atggctttct gtttcgc                27
186 <210> SEQ ID NO: 7
187 <211> LENGTH: 225
188 <212> TYPE: DNA
189 <213> ORGANISM: Vicia faba
191 <220> FEATURE:
192 <221> NAME/KEY: transit_peptide
193 <222> LOCATION: (1)..(225)
195 <220> FEATURE:
196 <221> NAME/KEY: CDS
197 <222> LOCATION: (1)..(225)
199 <400> SEQUENCE: 7
200 atg gct tcc atg aca atg cgg ttt cat cca aat tcc acc gcc gta acc    48
201 Met Ala Ser Met Thr Met Arg Phe His Pro Asn Ser Thr Ala Val Thr
202   1             5             10             15
203 gaa tcc gtt cct cgc cgt ggc tcc gtt tac gga ttc atc ggt tac aga    96
204 Glu Ser Val Pro Arg Arg Gly Ser Val Tyr Gly Phe Ile Gly Tyr Arg
205             20             25             30
206 tcc tcg tcg ttg ttc gtc cga acg aac gtt atc aag tat cgt tct gtt    144
207 Ser Ser Ser Leu Phe Val Arg Thr Asn Val Ile Lys Tyr Arg Ser Val
208             35             40             45
209 aag cgt aat ctg gaa ttt agg agg aga agc gct ttc tct gtg aag tgt    192
210 Lys Arg Asn Leu Glu Phe Arg Arg Arg Ser Ala Phe Ser Val Lys Cys
211             50             55             60
212 ggt tct ggt aat gaa gcg aaa cag aaa gcc atg                225
213 Gly Ser Gly Asn Glu Ala Lys Gln Lys Ala Met
214 65             70             75
217 <210> SEQ ID NO: 8
218 <211> LENGTH: 75
219 <212> TYPE: PRT
220 <213> ORGANISM: Vicia faba
222 <400> SEQUENCE: 8
223 Met Ala Ser Met Thr Met Arg Phe His Pro Asn Ser Thr Ala Val Thr
224   1             5             10             15
225 Glu Ser Val Pro Arg Arg Gly Ser Val Tyr Gly Phe Ile Gly Tyr Arg
226             20             25             30
227 Ser Ser Ser Leu Phe Val Arg Thr Asn Val Ile Lys Tyr Arg Ser Val
228             35             40             45
229 Lys Arg Asn Leu Glu Phe Arg Arg Arg Ser Ala Phe Ser Val Lys Cys
230             50             55             60
231 Gly Ser Gly Asn Glu Ala Lys Gln Lys Ala Met

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232 65

70

75

VERIFICATION SUMMARY

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Input Set : A:\Final sequence list-13173-00008-US.txt

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L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date